

## Online Sales and Unpaid Illinois Sales and Use Tax

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Online sales can erode sales tax revenue because out-of-state sellers are not legally required to collect sales tax if the buyer resides in a state where the seller has no substantial physical presence, or nexus.<sup>1</sup> In such cases, the buyer is required by law to remit the applicable use tax to the state. Unfortunately, use tax enforcement against individual consumers is extremely difficult (as opposed to, for example, use tax enforcement against sellers with nexus). A result of this low compliance from individuals is significant unpaid use tax.

In what follows, we estimate the unpaid use tax from online sales to Illinois households and businesses for calendar years 2005 through 2010, and for Illinois state fiscal years 2006 through 2010.

We estimate that the State of Illinois' General Fund is losing a theoretical maximum of some \$153 million in unpaid tax on online sales. While not insignificant, this estimate is only 2.2 percent of current General Fund sales tax collections, and even if legislation requiring collection of use tax was signed into law, we would not expect 100 percent compliance. It should be noted that the numbers presented below are significantly lower than the \$497 million to \$778 million from the much cited 2004 Bruce and Fox study.<sup>2</sup>

Summary results are in Table 1 below. Tables 2 and 3 present detailed results for online retail sales and online wholesale sales, respectively.

<b>Table 1 – Unpaid Tax On Online Sales to Illinois Households and Businesses (\$ millions)</b>						
<b>Calendar Year</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>
Unpaid tax on online sales to IL households and businesses	<u>\$103</u>	<u>\$121</u>	<u>\$138</u>	<u>\$147</u>	<u>\$158</u>	<u>\$169</u>
<b>a.</b> IL household share	\$57	\$68	\$81	\$86	\$92	\$99
<b>b.</b> IL business share	\$47	\$53	\$57	\$61	\$66	\$70
<b>Fiscal Year</b>		<b>FY06</b>	<b>FY07</b>	<b>FY08</b>	<b>FY09</b>	<b>FY10</b>
Unpaid tax on online sales to IL households and businesses		<u>\$112</u>	<u>\$130</u>	<u>\$143</u>	<u>\$153</u>	<u>\$163</u>
<b>a.</b> IL household share		\$62	\$74	\$83	\$89	\$95
<b>b.</b> IL business share		\$50	\$55	\$59	\$63	\$68

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<sup>1</sup> See the U.S. Supreme Court's decision in *Quill Corp. v. North Dakota* (91-0194), 504 U.S. 298 (1992). <http://supct.law.cornell.edu/supct/html/91-0194.ZO.html>

<sup>2</sup> Bruce, D and W Fox. State and Local Sales Tax Revenue Losses from E-Commerce: Estimates as of July 2004. Center for Business and Economic Research, University of Tennessee. In the Bruce and Fox Study, the sales tax rate attributed to the state of Illinois is 6.25 percent. For comparison purposes we reduce the tax rate to 5 percent - the amount retained by state government.

## Methodology

Our estimate uses a 5 percent sales and use tax rate and proceeds as follows:<sup>3</sup>

- Begin with actual or projected U.S. online sales.
- Estimate Illinois' share of U.S. online sales.
- Exclude items and transactions that either
  - a) would not be subject to Illinois' 5 percent sales and use tax if sold to an Illinois household or business or
  - b) are subject to strong use tax enforcement.
- Divide the taxable remote sales into household and business shares.
- Estimate how much of the tax due is actually paid, either to the retailer or directly to IDOR in the form of use tax

Our estimates of lost revenue are not equivalent to what Illinois would collect if federal legislation requiring retailers to collect use tax was enacted, for two reasons. First, even if such legislation were enacted, there would not be 100 percent compliance. Second, our estimate does not account for consumers' response to the higher tax price. If the tax price of online sales increases, online sales will decrease. Some consumers will simply substitute local sales for online sales, but others will be priced out of the market entirely, forgoing purchases that they would otherwise have made.

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<sup>3</sup> Illinois' base sales and use tax rate is 6.25 percent, but only 80 percent of the revenue from this rate is retained by state government. The equivalent tax rate is therefore 5 percent. The remaining 20 percent of revenue is distributed to local governments.

**Online Retail Estimate – Table 2**

(\$ millions)			2005	2006	2007	2008	2009	2010
1	Online Retail Sales in the United States.		\$87,397	\$106,583	\$127,690	\$136,628	\$146,192	\$156,426
2	Illinois Share (Illinois' share of U.S. retail sales)	4.3%	\$3,758	\$4,583	\$5,491	\$5,875	\$6,286	\$6,726
3	Illinois Share After Excluding MV, Food, Drugs, and Direct Selling Establishments		\$2,433	\$2,949	\$3,533	\$3,781	\$4,045	\$4,328

Illinois Households (\$ millions)			2005	2006	2007	2008	2009	2010
4	Taxable Share of Step 3 Bought By Illinois Households	79.1%	\$1,925	\$2,333	\$2,795	\$2,991	\$3,200	\$3,424
5	Tax Due On Taxable Sales To Illinois Households	5%	\$96	\$117	\$140	\$150	\$160	\$171
6	Tax Paid	49%	\$47	\$57	\$68	\$73	\$78	\$84
7	Calendar Year Unpaid Tax		\$49	\$59	\$71	\$76	\$82	\$87
8	Fiscal Year Unpaid Tax			\$54	\$65	\$74	\$79	\$84

Illinois Businesses (\$ millions)			2005	2006	2007	2008	2009	2010
4	Taxable Share of Step 3 Bought By Illinois Businesses	11.0%	\$268	\$324	\$389	\$416	\$445	\$476
5	Tax Due On Taxable Sales To Illinois Businesses	5%	\$13	\$16	\$19	\$21	\$22	\$24
6	Tax Paid	90%	\$12	\$15	\$17	\$19	\$20	\$21
7	Calendar Year Unpaid Tax		\$1.3	\$1.6	\$1.9	\$2.1	\$2.2	\$2.4
8	Fiscal Year Unpaid Tax			\$1.5	\$1.8	\$2.0	\$2.2	\$2.3

**Online Wholesale Estimate – Table 3**

(\$ millions)			2005	2006	2007	2008	2009	2010
1	Online Wholesale Sales, Including MSBOs, in the United States		\$1,049,264	\$1,148,181	\$1,228,554	\$1,314,552	\$1,406,571	\$1,505,031
2	Illinois Share (Illinois' share of U.S. wholesale and MSBO sales)	6.8%	\$71,350	\$78,076	\$83,542	\$89,390	\$95,647	\$102,342
3	Illinois Share After Excluding MV, Food, and Drugs		\$33,003	\$37,626	\$40,260	\$43,078	\$46,094	\$49,320

Illinois Households (\$ millions)			2005	2006	2007	2008	2009	2010
4	Taxable Share of Step 3 Bought By Illinois Households	0.9%	\$297	\$339	\$362	\$388	\$415	\$444
5	Tax Due On Taxable Sales To Illinois Households	5%	\$15	\$17	\$18	\$19	\$21	\$22
6	Tax Paid	49%	\$7	\$8	\$9	\$9	\$10	\$11
7	Calendar Year Unpaid Tax		\$8	\$9	\$9	\$10	\$11	\$11
8	Fiscal Year Unpaid Tax			\$8	\$9	\$10	\$10	\$11

Illinois Businesses (\$ millions)			2005	2006	2007	2008	2009	2010
4	Taxable Share of Step 3 Bought By Illinois Businesses	27.5%	\$9,076	\$10,347	\$11,071	\$11,846	\$12,676	\$13,563
5	Tax Due On Taxable Sales To Illinois Businesses	5%	\$454	\$517	\$554	\$592	\$634	\$678
6	Tax Paid	90%	\$408	\$466	\$498	\$533	\$570	\$610
7	Calendar Year Unpaid Tax		\$45	\$52	\$55	\$59	\$63	\$68
8	Fiscal Year Unpaid Tax			\$49	\$54	\$57	\$61	\$66

## **I. Methodology**

Each year the U.S. Census Bureau estimates the volume of e-commerce for the retail sector (NAICS 44-45), the wholesale sector (NAICS 42), and the manufacturing sector (NAICS 31-33).<sup>4</sup> The U.S. Census defines e-commerce as the value of goods and services sold online. The term "online" as used by the Census includes the use of the internet, intranet, extranet, as well as proprietary networks that run systems such as Electronic Data Interchange (EDI). EDI is a non-Internet based proprietary network for transferring electronic documents, such as purchase orders, between companies, and it accounts for approximately 84 percent of all business-to-business electronic commerce, according to the U.S. Census.

We exclude the manufacturing sector estimates from our calculations because the manufacturing e-commerce activity reported by the Census is value of shipments, not the value of sales, as is the case with the retail and wholesale sectors. Online sales by the manufacturing sector are still included in our calculations, however, because the Census estimates for the wholesale sector include the online sales of manufacturers' sales branches and offices (MSBOs). We also exclude all service spending from our estimate, as services are not subject to Illinois sales and use tax. We treat retail and wholesale online sales separately in Part A and Part B, respectively, below.

### **A. Online Retail Sales – NAICS 44-45**

#### **Online Retail Sales in the United States**

The U.S. Census Bureau's most recent annual e-commerce report, which is for calendar year 2006, estimates the volume of U.S. online retail sales for 2005 and 2006 at \$87.4 billion and \$106.6 billion, respectively. We obtained the online sales volume for 2007, \$127.7 billion, from the Census Bureau's quarterly retail e-commerce reports. Finally, we estimated the annual volumes for 2008 through 2010 by assuming an annual growth rate of 7 percent. Table 4 below summarizes the actual annual

growth rates for U.S. online retail sales since 2000. The compound annual growth rate for online sales from 2000 to 2007 was 24.1 percent, so our 2008 to 2010 estimates are conservative compared to past years. However, we favor lower growth assumptions in the near term in light of the ongoing weakening of consumer spending. As of this writing, the Census Bureau reports that online retail sales were up just 8.8 percent for the first three quarters of 2008. The trend through 2008 is one of increasing weakness, as illustrated in Table 4.

<b>Table 4 – Growth in U.S. Online Retail Sales</b>	
<b>Calendar Year</b>	<b>Percent Change From 1 Year Earlier</b>
2000	87.6%
2001	21.7%
2002	30.5%
2003	26.7%
2004	38.4%
2005	14.5%
2006	22.0%
2007	19.8%
2008 Q1	13.3%
2008 Q2	8.7%
2008 Q3	4.6%
2008 Q1-Q3	8.8%

<sup>4</sup> 2006 E-Commerce Multi-Sector Report. U.S. Census Bureau, May 16, 2008.  
<http://www.census.gov/eos/www/ebusiness614.htm>

The aggregate online retail sales total for each year is broken down by retail subsector. The break downs for 2005 and 2006 come from the Census Bureau's e-commerce report. The 2007 break down is estimated by increasing each 2006 subsector total by the overall growth in online retail sales for 2007 (19.8 percent). Finally, the break downs for 2008 to 2010 are estimated using the 7 percent growth assumption mentioned above. Most online retail sales are concentrated in NAICS 4541, or electronic shopping and mail-order houses, which we treat separately from the other subsectors. NAICS 4541 comprises establishments primarily engaged in retailing all types of merchandise using non-store means, such as catalogs, toll free telephone numbers, or electronic media. The remaining online retail sales are reported at the three-digit NAICS level. Table 5 below shows the subsector shares of retail online sales for 2006, as reported by the Census Bureau.

<b>Table 5 – Online Retail Sales by Subsector, 2006</b>	
<b>Retail Subsector</b>	<b>Share of Online Sales</b>
NAICS 4541 Electronic Shopping and Mail-order	70.6%
NAICS 441 Motor Vehicle and Parts Dealers	18.8%
NAICS 442 Furniture and Home Furnishings Stores	0.6%
NAICS 443 Electronic and Appliances Stores	1.1%
NAICS 444 Building Materials and Garden Equipment Stores	0.6%
NAICS 445 Food and Beverage Stores	0.7%
NAICS 448 Clothing and Clothing Accessory Stores	1.9%
NAICS 451 Sporting Goods, Books, Hobby, Music Stores	1.4%
NAICS 453 Misc. Stores	1.6%
NAICS 454 (non-4541 portion)	2.3%
NAICS 446, 447, 452	0.4%
Non-NAICS 4541	29.4%

### **Estimate Illinois' Share of U.S. Online Retail Sales**

We assume Illinois' share of online retail sales is 4.3 percent, which equals Illinois' share of U.S. retail sales, according to the 2002 Economic Census.

### **Exclude Items That Are Exempt Or Subject To Strong Tax Enforcement**

First, we exclude sales of exempt items. The 2002 Economic Census reports that 22.7 percent of receipts in NAICS 4541 are from the sale of exempt food, drugs, medical appliances, and non-merchandise services. Table 6 shows the product lines that comprise this 22.7 percent, all of which we exclude from this estimate.<sup>5</sup> We also exclude all sales of NAICS 445, food and beverage stores, on the simplifying assumption that all sales are of exempt food for off-premises consumption. Second, we exclude motor vehicle sales because we assume they do not result in unpaid use tax, thanks to the enforcement effect of Illinois vehicle registration requirements. According to the 2002 Economic Census, 0.6 percent of NAICS 4541's gross receipts are from the sale of motor vehicles. For NAICS 441, motor vehicle and parts dealers, 86.5 percent of gross receipts are from the sale of motor vehicles. We exclude these shares accordingly.

<sup>5</sup> For a complete list of NAICS 4541 product lines as reported by the 2002 Economic Census, please see the appendix.

**Table 6 – Exempt Product Lines and Share of Total NAICS 4541 Receipts**

Prescriptions	19.0%
All non-merchandise receipts (e.g. handling charges)	1.7%
Groceries & other foods for human consumption off the premises	1.2%
Nonprescription medicines	0.5%
Optical goods, incl. eyeglasses, contact lenses, sunglasses, etc.	0.2%
Hearing aids & supplies	0.1%
Total exempt percentage	22.7%
Source: 2002 Economic Census. Sector 44: Retail Trade: Industry Series: Product Lines by Kind of Business for the United States: 2002	

We were initially concerned that the 86.5 percent share was too high because it reflects the receipts of both online dealers and traditional “brick and mortar” dealers. We tested the reasonableness of applying the 86.5 percent share to online sales in NAICS 441 by working out the implications for NAICS 441 as a whole. If we assume 86.5 percent is accurate, it implies that 1.8 percent of motor vehicles and 3.3 percent of motor vehicle parts in NAICS 441 are sold online. These shares agree with what we would expect given the ratio of total online retail sales to total retail sales, which is around 3 percent. We therefore carry the 86.5 percent assumption without adjustment.

Finally we exclude all sales of NAICS 454 outside of NAICS 4541. The non-4541 portion of NAICS 454 consists of direct selling establishments and vending machine operators. Direct selling establishments typically go to the customer’s location rather than the customer coming to them (e.g., door-to-door sales, in-home sales parties) and includes businesses such as mobile food services and heating oil dealers making residential deliveries. The nature of these direct selling and vending sales suggest that nexus applies in most if not all cases. Therefore, the sales have been excluded under the assumption that applicable tax is collected pursuant to legal requirements.

### **Exclude Exempt Transactions Based On Buying Entity or Use, and Divide Sales Into Household and Business Shares**

Next we adjust the online sales to exclude transactions that are exempt from Illinois’ 5 percent sales and use tax, either because the buyer is an exempt entity (e.g., a designated charitable organization) or because the item is purchased for an exempt use (e.g., a purchase for resale). We make this adjustment using the 2002 Economic Census, which disaggregates the sales of each retail subsector by class of customer or use. We also use the class of customer information to estimate the share of online retail sales that are taxable sales to households and businesses. Table 7 presents the class of customer/use shares for NAICS 4541. The share of taxable sales to households is 79.1 percent. We applied this same percentage to the non-4541 online retail subsectors because we believe that NAICS 4541’s class of customer shares are more representative of remote sales when compared to the class of customer shares of other retail subsectors, which include and are dominated by the sales of traditional “brick and mortar” retail locations. The class of customer/use information also shows that 11 percent of NAICS 4541 sales are taxable sales to businesses. Again, we applied this same percentage to the non-4541 online retail subsectors.

**Table 7 – Class of Customer/Use Categories for NAICS 4541**

(Taxable sales to businesses are in gray)	<b>Taxable</b>	<b>Exempt</b>
Households and individual users	79.1%	
Retailers for resale		3.4%
Wholesale establishments for resale		1.5%
Repair shops for use in repair work		0.3%
Manufacturing and mining industrial users for use as input goods in production		0.1%
Restaurants, hotels, food services, and contract feeding	0.1%	
Businesses for end use in their own operation, not for resale or production	8.8%	
Building contractors, heavy construction, and special trade contractors	0.2%	
Farmers for use in farm production		0.1%
Export sales		0.3%
Governmental bodies (federal, state, and local)		2.3%
All other customers (split 50/50 between taxable and exempt)	1.9%	1.9%

Source: 2002 Economic Census. Sector 44: Retail Trade: Subject Series - Misc Subjects: Sales by Class of Customer for the United States: 2002

A few comments about this class of customer/use information. First, we assume that one-half of the "All Other Customers" category is comprised of sales to non-governmental tax exempt organizations. Second, we assume that all sales to restaurants, hotels, food services, and contract feeding businesses are taxable sales for end-use. This is because food was excluded in the earlier adjustment for sales of exempt items and because this subsector does not typically engage in the resale of non-food goods.

### **Estimate the Tax Due on Illinois' Taxable Share**

We calculate the taxes due by applying the 5 percent state sales and use tax rate to the taxable base.

### **Subtract Taxes Paid from Taxes Due to Calculate Unpaid Tax**

Finally, we find the difference between the taxes that are due and the taxes that are actually paid. This difference is the amount of unpaid tax. The amount of tax that is actually paid is a function of (a) the percentage of online spending that is received by retailers who collect Illinois sales tax and (b) the amount of use tax on online sales paid to IDOR by Illinois households and businesses.

The percentage of tax due that is actually paid is different for households and businesses primarily because businesses are subject to stronger use tax enforcement via regular audits. Based on their auditing experience, IDOR auditors estimate that 90 percent of taxes due on online sales to Illinois businesses are paid, so we subtract 90 percent of the taxes due on the business share to calculate the share of taxes that are unpaid by businesses. To convert our calendar year estimates of unpaid tax to fiscal year estimates, we averaged the two overlapping calendar years. For example, fiscal year 2006 is the average of calendar years 2005 and 2006.

Estimating the tax paid percentage for households is a bit more complicated. The market research firm Internet Retailer publishes an annual report that ranks the top 100 online retailers in the United States, measured in terms of total online sales. We visited each web site on the 2008 list (based on 2007 sales) to determine which ones are currently collecting Illinois sales tax.



Our survey found that 68 percent of the top 100 group's online receipts are received by retailers who collect Illinois sales tax. Since the top 100 group accounted for 53 percent of all U.S. online retail sales in 2007, according to Internet Retailer, our survey suggests that at minimum 36 percent of all online retail spending is received by retailers who collect Illinois sales tax (68 percent x 53 percent = 36 percent). To the degree that online retailers outside of the top 100 group collect Illinois sales tax, this minimum collection rate will be higher. We do not have information on the collection rate for online retailers outside of the top 100 group. However, we assume that the rate is significantly lower than the top 100 group's 68 percent, reflecting our belief that smaller online retailers are less likely than larger online retailers to have Illinois nexus. If we assume that just 20 percent to 30 percent of online retail spending outside of the top 100 group is received by retailers who collect Illinois sales tax, then the Illinois sales tax collection rate for all online retail sales would be between 46 percent and 50 percent (68 percent x 53 percent plus either 20 percent or 30 percent x 47 percent equals 46 percent or 50 percent). Next, we increase this range to reflect the use tax paid by Illinois households on sales excluding motor vehicles. On average, this amounts to only \$4 million each year (at the 5 percent tax rate). Since we have no way to determine how much of this use tax was generated by online purchases, remote offline purchases (e.g., mail-order), or physical border crossing, we decided to split the amount evenly between the three possibilities, leaving just \$1.3 million paid each year on online retail sales to households. If we divide this \$1.3 million in use tax by the estimated amount of tax due on online sales to households, the result is 1.4 percent, which when added to each end of the 46 percent to 50 percent online retailer collection range equals 47.4 percent to 51.4 percent.

Finally, for the sake of simplicity and because the range is so narrow, we averaged 47.4 percent and 51.4 percent and then rounded to yield an estimated tax paid share of 49 percent. We then subtract 49 percent of the taxes due on the online retail sales to Illinois households to produce the share of taxes that are unpaid. To convert the final calendar year estimates to fiscal year estimates, we average the two overlapping calendar years. For example, fiscal year 2006 is the average of calendar years 2005 and 2006.

## **B. Online Wholesale Sales, Including MSBOs – NAICS 42**

### **Online Wholesale Sales in the United States**

The U.S. Census Bureau's 2006 e-commerce report estimates the volume of U.S. online wholesale sales, including MSBOs, for 2005 and 2006 at \$1.05 trillion and \$1.15 trillion, respectively. We estimated the annual volumes for 2007 through 2010 by assuming an annual growth rate of 7 percent, the same as we assumed for online retail sales. We should note that predicting the trend of this growth rate is difficult. Only four years of annual growth observations are available for the online sales of merchant wholesalers & MSBOs, and the growth is somewhat volatile (see Table 8). By assuming 7 percent annual growth, we generate a conservative estimate.

**Table 8 – NAICS 42 – Merchant Wholesalers & MSBOs Annual Online Sales Growth**

<b>NAICS 42 Online Sales</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>
<b>including MSBOs</b>	12.4%	18.5%	17.1%	9.4%

### **Estimate Illinois' Share of U.S. Online Wholesale Sales**

We assume Illinois' share of online wholesale sales is 6.8 percent, which equals Illinois' share of U.S. wholesale sales, according to the 2002 Economic Census.

### **Exclude Items That Are Exempt Or Subject To Strong Tax Enforcement**

First, we exclude sales of exempt food, drugs, and medical appliances, where possible, by excluding the receipts of NAICS 4242 (drugs) and NAICS 4244 (groceries).

Second, we exclude sales of motor vehicles because we assume they do not result in unpaid use tax, thanks to the enforcement effect of vehicle registration requirements. According to the 2002 Economic Census, 63.5 percent of receipts in NAICS 4231, motor vehicles and automotive equipment, are from the sale of motor vehicles. We therefore exclude this share of NAICS 4231's receipts from our estimate.

### **Exclude Exempt Transactions Based On Buying Entity or Use, and Divide Sales Into Household and Business Shares**

The 2002 Economic Census disaggregates the sales of NAICS 42 by class of customer or use, thereby enabling us to exclude sales that are exempt either because the buyer is an exempt entity (e.g., a government) or because the item is purchased for an exempt use (e.g., purchase for resale). Table 9 shows each class of customer category/use, the percentage of receipts in each category, and whether we treat the category as taxable or exempt. The taxable household share is 0.9 percent, and the taxable business share is 27.5 percent.

**Table 9 – Class of Customer Categories for NAICS 42**

(Taxable sales to businesses are in gray)	Taxable	Exempt
Households and individual users	0.9%	
Retailers for resale		45.7%
Wholesale establishments for resale		
Repair shops for use in repair work (assume purchases are parts for resale)	1.4%	
Manufacturing and mining industrial users for use as input goods in production		14.7%
Restaurants, hotels, food services, and contract feeding	5.2%	
Businesses for end use in their own operation, not for resale or production	14.0%	
Building contractors, heavy construction, and special trade contractors	5.5%	
Farmers for use in farm production		2.2%
Export sales		4.8%
Governmental bodies (federal, state, and local)		2.9%
All other customers (split 50/50 between taxable and exempt)	1.4%	1.4%
Source: 2002 Economic Census. Sector 44: Retail Trade: Subject Series - Misc Subjects: Sales by Class of Customer for the United States: 2002		

A few comments about this class of customer/use information. First, we assume that one-half of the "All Other Customers" category is comprised of sales to non-governmental tax exempt organizations. Second, we assume that all sales to restaurants, hotels, food services, and contract feeding businesses are taxable sales for end-use. This is because food was excluded in the earlier adjustment for sales of exempt items and because this sub-sector does not typically engage in the resale of non-food goods. Third, the inclusion of the customer category "wholesale establishments for resale" within NAICS 42 introduces a minor complication. Since NAICS 42 is comprised of wholesale establishments, the customer category is circular. To break this

circularity, we distributed the “wholesale establishments for resale” category according to the weights of the other categories. Table 9 reflects this redistribution.

### **Estimate the Tax Due on Illinois’ Taxable Share**

We calculate the taxes due by applying the 5 percent state sales and use tax rate to the taxable base.

### **Subtract Taxes Paid from Taxes Due to Calculate Unpaid Tax**

We use the same tax paid percentages for online wholesale sales as we did for online retail sales, i.e., 49 percent for households and 90 percent for businesses. To convert our final calendar year estimates to fiscal year estimates, we average the two overlapping calendar years. For example, fiscal year 2006 is the average of calendar years 2005 and 2006.

### **Conclusion**

Our goal in conducting this research was to develop a methodology that we felt was sound and that we could explain and justify to policy makers. Too often we hear states talk about very large, and in our opinion, unrealistic estimates of tax loss due to online sales. Even though our estimate indicates that Illinois may end up generating something less than \$150 million in additional tax revenue, should the requisite federal legislation pass, this is much less than the often cited \$497 million to \$778 million. Requiring online retailers to collect and remit sales tax is fair and equitable from a tax policy standpoint, but it is not the silver bullet that state and local governments are looking for to close current budget gaps.

## Appendix

<b>NAICS 4541 Product Lines By Share of Total Receipts</b>	
(tax exempt categories are in gray)	
NAICS 4541 total	100.0%
Prescriptions	19.0%
Computer hardware, software, & supplies	16.2%
Women's, juniors', & misses' wear	6.6%
Kitchenware & home furnishings	4.4%
Jewelry, incl. watches, watch attach, novelty jewelry, etc.	3.7%
Sporting goods	3.6%
Books	3.4%
Office & school supplies	3.2%
Audio equip, musical instruments, radios, stereos, CDs, records, etc.	3.0%
Vitamins, minerals, & other dietary supplements	2.8%
Automotive tires, tubes, batteries, parts, accessories	2.4%
TVs, video recorders, video cameras, video tapes, DVDs, etc.	2.1%
Toys, hobby goods, & games	2.1%
Men's wear	1.9%
All other merchandise	1.8%
All non-merchandise receipts	1.7%
Collectibles, incl. items which are old, but less than 100 years old	1.6%
Furniture, sleep equipment & outdoor/patio furniture	1.5%
Footwear, including accessories	1.4%
Souvenirs & novelty items	1.3%
Groceries & other foods for human consumption off the premises	1.2%
Curtains, draperies, blinds, slipcovers, bed & table coverings	1.2%
Lawn, garden, & farm equipment & supplies	1.2%
Cosmetics, incl. face cream, make-up, perfumes & colognes etc.	1.1%
Health aids, incl. first-aid prod; foot prod; orthopedic equip; etc.	1.0%
Stationery products	0.9%
Children's wear, incl. boys, girls, & infants & toddlers	0.8%
Hardware, tools, & plumbing & electrical supplies	0.8%
Office paper, incl. computer, copier, fax & typewriter paper	0.8%
Automobiles, cars, vans, trucks, motorcycles, motor scooters, etc.	0.6%
Office equip, incl. fax machines, dictaphones, copier, calculators	0.6%
Magazines & newspapers	0.6%
Nonprescription medicines	0.5%
Major household appliances	0.5%
All other merchandise	0.5%
Paper & related prod, incl. paper towels, toilet tissue, wraps, etc.	0.4%
Pets, pet foods, & pet supplies	0.4%
Cigars, cigarettes, etc. & smokers' accessories	0.3%
Small electric appliances & personal care appliances	0.3%
Flooring & floor coverings	0.3%
Photographic equipment & supplies	0.3%

<b>NAICS 4541 Product Lines By Share of Total Receipts - continued</b>	
Packaged liquor, wine, & beer	0.2%
Other hygiene needs, incl. deodorants; hair & shaving products, etc.	0.2%
Sewing, knitting materials & supplies, needlework goods	0.2%
Optical goods, incl. eyeglasses, contact lenses, sunglasses, etc.	0.2%
Luggage & leather goods	0.2%
Art goods, including original pictures & sculptures	0.2%
Artificial/silk flowers, plants, & trees	0.2%
Hearing aids & supplies	0.1%
Soaps, detergents, & household cleaners	0.1%
Dimensional lumber & other bldg/structural materials & supplies	0.1%
Greeting cards	0.1%
Antiques, items over 100 years old	0.1%
Total tax exempt percentage	22.7%
Total motor vehicles percentage	0.6%
Total amount excluded	23.3%
Source: 2002 Economic Census. Sector 44: Retail Trade: Industry Series: Product Lines by Kind of Business for the United States: 2002	